**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

**Listing of Claims**

1 – 68. **(Cancelled).**

69. **(Previously presented)** An apparatus comprising:

a first group of first, second, and third holographic optical elements electrically switchable between active and inactive states;

a second group of first, second, and third holographic optical elements electrically switchable between active and inactive states;

wherein each holographic optical element comprises front and back oppositely facing surfaces;

wherein each of the first holographic optical elements diffracts first bandwidth light incident on the front surface thereof when operating in the active state,

wherein first bandwidth light diffracted by each of the first holographic optical elements emerges from the back surface thereof, and

wherein each of the first holographic optical elements transmits first bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein first bandwidth light transmitted by each of the first holographic optical elements emerges from the back surface thereof;

wherein each of the second holographic optical elements diffracts second bandwidth light incident on the front surface thereof when operating in the active state,

wherein second bandwidth light diffracted by each of the second holographic optical elements emerges from the back surface thereof, and

wherein each of the second holographic optical elements transmits second bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein second bandwidth light transmitted by each of the second holographic optical elements emerges from the back surface thereof;

wherein each of the third holographic optical elements diffracts third bandwidth light incident on the front surface thereof when operating in the active state,

wherein third bandwidth light diffracted by each of the third holographic optical elements emerges from the back surface thereof, and

wherein each of the third holographic optical elements transmits third bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein third bandwidth light transmitted by each of the third holographic optical elements emerges from the back surface thereof; a display device configured to display a monochrome image frame;

wherein the display device is configured to be illuminated directly or indirectly with light emerging from one of the first, second, or third holographic optical elements while the display device is displaying the monochrome image frame.

70. **(Previously presented)** The apparatus of claim 69 wherein the front surface of each holographic optical element is aligned orthogonal to a common axis.

71. **(Previously presented)** The apparatus of claim 70 further comprising a polarization rotation device positioned between the first and second groups of holographic optical elements,

wherein each of the holographic optical elements comprises a diffraction grating,

wherein all the holographic optical elements are positioned so that all the diffraction gratings are disposed parallel to each other.

72. **(Previously presented)** The apparatus of claim 70 wherein each of the holographic optical element of the first group comprises a first grating,

wherein the each of the second holographic optical elements of the second group comprises a second grating, and

wherein the holographic optical elements of the first and second groups are positioned so that the first gratings are disposed orthogonal to the second gratings.

73. **(Previously presented)** The apparatus of claim 69 further comprising a polarization rotation device positioned adjacent the front surface of the first holographic optical element of the first group of holographic optical elements,

wherein the front surfaces of the first holographic optical elements of each group are substantially contained in a first common plane,

wherein the front surfaces of the second holographic optical elements of each group are substantially contained in a second common plane,

wherein the front surfaces of the third holographic optical elements of each group are substantially contained in a third common plane,

wherein the first, second, and third common planes are positioned substantially parallel to each other.

74. **(Previously presented)** The apparatus of claim 71 wherein the first holographic optical elements are configured to diffract first bandwidth light in a first plane of polarization when operating in the active state,

wherein the first holographic optical elements are configured to transmit first bandwidth light in a second plane of polarization without substantial alteration when operating in the active state,

wherein the second holographic optical elements are configured to diffract second bandwidth light in the first plane of polarization when operating in the active state, and

wherein the second holographic optical elements are configured to transmit second bandwidth light in the second plane of polarization without substantial alteration when operating in the active state,

wherein the third holographic optical elements are configured to diffract third bandwidth light in the first plane of polarization when operating in the active state, and

wherein the third holographic optical elements are configured to transmit third bandwidth light in the second plane of polarization without substantial alteration when operating in the active state,

wherein the first plane of polarization is orthogonal to the second plane of polarization.

75. **(Previously presented)** The apparatus of claim 72 wherein the first holographic optical elements of the first and second groups are configured to diffract first bandwidth light in a first plane of polarization and first bandwidth light in a second plane of polarization, respectively, when operating in the active state,

wherein the first holographic optical elements of the first and second group are configured to transmit first bandwidth light in the second plane of polarization and first bandwidth light in the first plane of polarization, respectively, without substantial alteration when operating in the active state,

wherein the second holographic optical elements of the first and second groups are configured to diffract second bandwidth light in the first plane of polarization and second bandwidth light in the second plane of polarization, respectively, when operating in the active state,

wherein the second holographic optical elements of the first group and second groups are configured to transmit second bandwidth light in the second plane of polarization and second bandwidth light in the first plane of polarization, respectively, without substantial alteration when operating in the active state,

wherein the third holographic optical elements of the first and second groups are configured to diffract third bandwidth light in the first plane of polarization and third bandwidth light in the second plane of polarization, respectively, when operating in the active state,

wherein the third holographic optical elements of the first group and second groups are configured to transmit third bandwidth light in the second plane of polarization and third bandwidth light in the first plane of polarization, respectively, without substantial alteration when operating in the active state,

wherein the first plane of polarization is orthogonal to the second plane of polarization.

76. **(Previously presented)** The apparatus of claim 70 further comprising a control circuit coupled to all of holographic optical elements, wherein each holographic optical element switches between active and inactive states in response to control signals generated by the control circuit.

77. **(Previously presented)** The apparatus of claim 76 wherein the first holographic optical elements simultaneously operate in the active state in response to an activation control signal generated by the control circuit while the second holographic optical elements and the third holographic optical elements simultaneously operate in the inactive state in response to a deactivation signal generated by the control circuit.

78. **(Previously presented)** The apparatus of claim 69 wherein diffracted first, second, and third bandwidth light is emitted from the back surface of the first, second, and third holographic optical elements of the first group, respectively, in a direction that is substantially similar to a direction of diffracted first, second, and third bandwidth light emitted from the back surface of the first, second, and third holographic optical elements, respectively.

79. **(Previously presented)** The apparatus of claim 70 further comprising:

an image signal processor coupled to the display device, wherein the display device is configured to display first, second, and third monochrome image frames in response to receiving first, second, and third frames of image signals, respectively, generated in sequence by the image signal processor;

wherein the first, second, and third monochrome image frames displayed by the display device are illuminated directly or indirectly with first, second, and third bandwidth light, respectively, emitted from the first and second groups of holographic optical elements.

80. **(Previously presented)** The apparatus of claim 79 further comprising:

a light source for generating incoherent light;

a light condenser positioned adjacent the light source and configured to condense incoherent light generated by the light source into a parallel beam of incoherent light;

wherein the front surface of the first holographic optical element of the first group is configured to receive the parallel beam of incoherent light.

81. **(Previously presented)** The apparatus of claim 73 further comprising:

an image signal processor coupled to the display device, wherein the display device is configured to display first, second, and third monochrome image frames in response to receiving first, second, and third frames of image signals, respectively, generated in sequence by the image signal processor;

wherein the first, second, and third monochrome image frames displayed by the display device are illuminated directly or indirectly with first, second, and third bandwidth light, respectively, emitted from the first and second groups of holographic optical elements.

82. **(Previously presented)** The apparatus of claim 81 further comprising:

a light source for generating incoherent light;

a light condenser positioned adjacent the light source and configured to condense the incoherent light generated by the light source into a parallel beam of incoherent light;

a beam splitting cube positioned adjacent the condenser and the first holographic optical element of the second group, wherein the beam splitting cube is configured to receive and split the parallel beam of incoherent light into first and second parallel beams of light,

wherein the first and second parallel beams of light are contained in orthogonal planes of polarization,

wherein the beam splitting cube is configured to deflect the second parallel beam of light onto the front surface of the first holographic optical element of the second group, and

wherein the beam splitting cube is configured to pass the first parallel beam of light without substantial deflection; a total internal reflection prism positioned adjacent the beam splitting cube and the polarization rotation device,

wherein the total internal reflection prism is configured to receive the first parallel beam of light, wherein the total internal reflection prism is configured to deflect the received first parallel light onto the polarization rotation device.

83. **(Previously presented)** The apparatus of claim 69 wherein each holographic optical element of the first group is formed from polymer dispersed liquid crystal material.

84. **(Previously presented)** The apparatus of claim 69 wherein each of the holographic optical elements of the first and second groups are formed from polymer dispersed liquid crystal material which undergoes phase separation during a hologram recording process to create regions populated by liquid crystal droplets and to create regions of clear photopolymer interspersed by regions populated by liquid crystal droplets.

85. **(Previously presented)** The apparatus of claim 69 wherein each of holographic optical elements of the first and second groups comprises a volume phase hologram recorded in a holographic recording medium.

86. **(Previously presented)** The apparatus of claim 69 further comprising a control circuit and a voltage source, wherein the control circuit is configured to selectively couple the voltage source to the each of the holographic optical elements in the first and second groups,

wherein each of the holographic optical elements in the first and second groups operate in the inactive state when coupled to the voltage source, and

wherein each of the holographic optical elements in the first and second groups operate in the active state when coupled to the voltage source.

87. **(Previously presented)** The apparatus of claim 69 wherein each of the holographic optical elements of the first group comprises a layer of material that records an electrically switchable hologram and at least one layer of electrically conductive material positioned adjacent the layer of material that records the electrically switchable hologram.

88. **(Previously presented)** The apparatus of claim 87 wherein each layer of electrically conductive material is configured to be selectively coupled to a voltage source, wherein each holographic optical element of the first group operates in the inactive state when at least one of its layers of electrically conductive material is coupled to the voltage source, and

wherein each holographic optical element of the first group operates in the active state when at least one of its layers of electrically conductive material is not coupled to the voltage source.

89. **(Previously presented)** The apparatus of claim 79 further comprising:

a light source for generating incoherent light;

a light condenser positioned adjacent the light source and configured to condense incoherent light generated by the light source into a parallel beam of incoherent light;

a prism positioned adjacent the light condenser and the front surface of the first holographic optical element of the first group, wherein the prism is configured to deflect the parallel beam of incoherent light onto the front surface of the first holographic optical element of the first group.

90. **(Currently amended)** An apparatus comprising:

a light source for generating incoherent light;

a condensing lens for condensing the incoherent light into a parallel beam of incoherent light, and;

an image display;

a solid state optical element for receiving directly or indirectly the parallel beam of incoherent light from the condensing lens and for sequentially illuminating the image display directly or indirectly with first, second, and third bandwidth light,

wherein the solid state optical element comprises at least one hologram switchable between active and inactive states,

wherein the at least one hologram is configured to diffract a first bandwidth light when operating in the active mode, and

wherein the at least one hologram is configured to transmit the first bandwidth light without substantial alteration when operating in the inactive state.

91. **(Previously presented)** An apparatus comprising:

a first group of first, second, and third holographic optical elements electrically switchable between active and inactive states;

a second group of first, second, and third holographic optical elements electrically switchable between active and inactive states;

wherein each holographic optical element comprises front and back oppositely facing surfaces;

wherein each of the first holographic optical elements diffracts first bandwidth light incident on the front surface thereof when operating in the active state,

wherein first bandwidth light diffracted by each of the first holographic optical elements emerges from the front surface thereof, and

wherein each of the first holographic optical elements transmits first bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein first bandwidth light transmitted by each of the first holographic optical elements emerges from the back surface thereof;

wherein each of the second holographic optical elements diffracts second bandwidth light incident on the front surface thereof when operating in the active state,

wherein second bandwidth light diffracted by each of the second holographic optical elements emerges from the front surface thereof, and

wherein each of the second holographic optical elements transmits second bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein second bandwidth light transmitted by each of the second holographic optical elements emerges from the back surface thereof;

wherein each of the third holographic optical elements diffracts third bandwidth light incident on the front surface thereof when operating in the active state,

wherein third bandwidth light diffracted by each of the third holographic optical elements emerges from the front surface thereof, and

wherein each of the third holographic optical elements transmits third bandwidth light incident on the front surface thereof without substantial alteration when operating in the inactive state,

wherein third bandwidth light transmitted by each of the third holographic optical elements emerges from the back surface thereof;

a display device configured to display a monochrome image frame;

wherein the display device is configured to be illuminated directly or indirectly with light emerging from one of the first, second, or third holographic optical elements while the display device is displaying the monochrome image frame.